



University of Warwick institutional repository: <http://go.warwick.ac.uk/wrap>

This paper is made available online in accordance with publisher policies. Please scroll down to view the document itself. Please refer to the repository record for this item and our policy information available from the repository home page for further information.

To see the final version of this paper please visit the publisher's website. Access to the published version may require a subscription.

Author(s): MICHAEL J. MOL and MASA AKI KOTABE

Article Title: OVERCOMING INERTIA:
DRIVERS OF THE OUTSOURCING PROCESS

Year of publication: Forthcoming

Link to published article:

<http://www.lrp.ac/>

Publisher statement: Mol, M. J. and Kotabe, M. OVERCOMING INERTIA: DRIVERS OF THE OUTSOURCING PROCESS. Long Range Planning. <http://www.lrp.ac/>

**OVERCOMING INERTIA:
DRIVERS OF THE OUTSOURCING PROCESS**

MICHAEL J. MOL
Warwick Business School
University of Warwick
Coventry, CV4 7AL, UK
United Kingdom
phone ++44 (0)24 7652 2148
michael.mol@wbs.ac.uk

&

MASAAKI KOTABE
Temple University
The Fox School of Business
1801 Liacouras Walk
559 Alter Hall (006-14)
Philadelphia, PA 19122-6083
U.S.A.
Tel: 215-204-7704
mkotabe@temple.edu

Acknowledgements. The authors would like to thank Statistics Netherlands for allowing them access to the data and participating managers for the time they were granted. They are also indebted to Jos Benders, Gary Hamel, Sotirios Paroutis, Duncan Robertson, and Ed Zajac for insightful discussions and comments on earlier versions of this paper. A previous version of this paper was presented at the 2008 Bocconi University and Temple University outsourcing / offshoring conferences and the 2008 Academy of Management conference. The authors take full responsibility for any remaining errors.

OVERCOMING INERTIA: DRIVERS OF THE OUTSOURCING PROCESS

Executive summary

Almost all managers have directly or indirectly been involved in the practice of outsourcing in recent years. But as they know, outsourcing is not straightforward. Outsourcing inertia, when companies are slow to adapt to changing circumstances that accommodate higher outsourcing levels, may undermine a firm's performance. This article investigates the presence of outsourcing inertia and the factors that help managers overcome it. Using statistical evidence, we show that positive performance effects related to outsourcing can accumulate when circumstances change. This is then followed by rapid increases in outsourcing levels (i.e. outsourcing processes). We investigate what gives rise to these outsourcing processes through follow-up interviews with sourcing executives, which suggest five drivers behind outsourcing processes: managerial initiative (using outside experience); hierarchy (foreign headquarters); imitation (of competitors and of similar firms); outsider advice (from external institutions); knowledge sources (using external information). These five drivers all offer scope for managerial action. We tie them to academic literatures and suggest ways of investigating their presence and impact on the outsourcing process. Overall, we conclude that while economizing factors play a key role in explaining how much firms outsource, it is socializing factors that tend to drive outsourcing processes.

Key words: Outsourcing; performance; inertia; strategy process; bandwagoning

The process of outsourcing, the organizational relocation of activities or entire functions outside a firm's boundaries, has been a key driver of business transformation over the past decades. Firms attempt to use outsourcing as one of the key methods of remaining competitive or even as a way of further improving their competitiveness vis-à-vis industry competitors. And where they previously mostly outsourced simple, peripheral activities, they now increasingly outsource manufacturing and service activities that sit near the center of their business models and involve proprietary processes.¹ Among academic approaches transaction cost economics² (TCE), related contracting approaches³, and the resource-based view of the firm⁴ (RBV) have been particularly instrumental in explaining outsourcing levels.

A relatively straightforward explanation of the costs of wrongful managerial decision-making has emerged⁵, in that a failure to align governance modes with transaction characteristics and firm resources induces efficiency losses, which eventually lead to firm failure. The argument suggests that managers will shift between the governance modes of make or buy whenever appropriate. Given alignment, the level of outsourcing in and of itself is believed not to directly influence organizational performance or competitive advantage because once an optimum set of decisions has been reached, no further performance gains will be obtained by outsourcing more or less and organizations in principal have no incentive to deviate from that optimum.

Yet practical puzzles remain that cannot be explained through this view of outsourcing, which Oliver Williamson calls economizing.⁶ For instance, some incumbent firms remain vertically integrated for a long time in the face of substantial change in their technological and institutional environments that shifts the balance between transaction and production costs to allow for more outsourcing.⁷ The U.S. automotive industry long remained too vertically integrated until the fact that Japanese competitors were successfully relying on keiretsu alliances with external suppliers was openly recognized as a key success factor.⁸

And the process of outsourcing often appears to take place in rapid (industry-wide) waves of sudden outsourcing, during which every manager wants to be seen engaged in outsourcing.⁹ Once the Detroit Big Three realized that Japanese firms were playing the game differently, they quickly and collectively copied Japanese practices of substantial outsourcing of key manufacturing activities and more cooperation with suppliers, albeit with mixed success.¹⁰ Understanding whether such resistance to change affects performance negatively, and what drivers eventually help firms overcome that resistance could help both practitioners and researchers.

The focus of this paper is on better understanding changes in outsourcing levels over time. We provide an argument for why outsourcing processes take place slowly, and perhaps belatedly, and then study what organizational factors drive these processes. We first construct a coherent set of propositions. We introduce the notion of outsourcing inertia as a useful way to characterize slow occurrence of outsourcing processes in the face of environmental change. We argue that such inertia will lead to a positive association between outsourcing levels and firm performance. When such a positive performance effect occurs, this will be eventually followed by rapid increases in outsourcing, which are triggered by various drivers inside and around the organization. To empirically investigate our propositions, we use a combination of large scale quantitative data and qualitative interview findings on businesses in the Netherlands. Finally we link the drivers of the outsourcing process to existing literatures and suggest implications for practice and theory. The drivers we find are suggestive of a socializing view of outsourcing processes, although we also find that economizing factors help explain outsourcing levels.

OUTSOURCING AND THE OUTSOURCING PROCESS

In academia and practice alike there is disagreement between two broad definitions of outsourcing. One suggests that outsourcing refers to *any goods and services that are procured from outside suppliers*. Lei and Hitt¹¹ think of outsourcing as “the reliance on external sources for the manufacturing of components and other value-adding activities.” The other definition of outsourcing looks at it as *a transfer process of activities possibly including related human, physical and other assets*, i.e., “the transfer of an internal service function to an outside vendor”.¹² We are not in a position to conclusively argue for one definition or the other. Instead, we refer to the first definition as *outsourcing level* or simply *outsourcing*, and the second definition as *outsourcing process*. These are analytically distinct entities. An outsourcing level is established at a single point in time while an outsourcing process takes place between two points in time. An outsourcing process causes a change in outsourcing levels. Another way to describe this is to argue that outsourcing levels determine the boundaries of the firm while outsourcing processes represent changes in those boundaries. This definition of outsourcing raises the issue: what these two points in time should be, i.e. when is an outsourcing process no longer an outsourcing process? Elsewhere Mol has argued that timing of outsourcing processes is context dependent¹³. For some activities that went through an outsourcing process just one or two decades ago, it has now become accepted practice that they are never undertaken internally. But for other activities, including perhaps many manufacturing activities, this is not the case. What matters in assessing whether an outsourcing process has ended is whether any further transfer is taking place of activity related knowledge or other assets from the buyer to the supplier. For all practical purposes, in this paper, we will focus on activities that were outsourced during a five year time period. Our primary focus is on understanding when and why significant outsourcing processes come about but we will invoke outsourcing levels to help create that understanding.

In the battle for supremacy over industry competitors, firms may apply outsourcing, or its counterpart of vertical integration, as one of the means for obtaining competitive advantage.¹⁴ For instance, if a firm times its outsourcing activities better, through instigating an outsourcing process sooner or perhaps later than its competitors, this might provide it with a temporary, or sometimes even a lasting, competitive advantage. But what activities should be outsourced and where should a firm's boundaries be? This question, often referred to as the make-or-buy question, is one of the key concerns of the theory of the firm. A variety of conceptual angles has been applied to answer it, but most prominently scholars have used economizing approaches in their efforts to determine what activities are best outsourced. There is no need to extensively review this literature here as this has been done elsewhere.¹⁵ In short, TCE presents a case for alignment of governance modes and transaction (activity) characteristics and the RBV proposes that firms align the governance mode of a transaction with the nature of the resource base of the firm. Because misalignment is costly¹⁶, firms will seek to perfectly align their governance modes with transaction characteristics and resource bases. No direct performance impact of outsourcing should be observed under perfect alignment as firms are merely choosing the governance modes that best suit the transactions they undertake, and the bundle of resources they control.¹⁷

If misalignment is indeed costly, then why does such misalignment occur as often and persist as long as our earlier examples suggest? This is a question that TCE and RBV, as theories of alignment, are particularly ill-equipped to handle, notwithstanding their contributions in explaining variance in outsourcing levels. The only answer these approaches generate, that managers may act ignorantly by not applying the alignment thesis, is not very satisfying.¹⁸ As a consequence, although they are very insightful in understanding outsourcing levels, these approaches do not shed much light on the drivers behind outsourcing processes. We therefore look at the outsourcing process as a form of strategy process and take on board approaches from

organization theory in doing so. In many areas of strategic decision-making, process is the least explored dimension of strategy¹⁹ and we believe this to be true for outsourcing.

OUTSOURCING INERTIA

We propose that organizations may suffer from ‘outsourcing inertia’. Inertia is a well-known concept and generally refers to an organization’s poor ability to change when its (environmental) circumstances change. The population ecologists Hannan and Freeman introduced the term structural inertia, when “organizations respond relatively slowly to the occurrence of threats and opportunities in their environment.”²⁰ The work of Hannan and Freeman and that of institutional theorists like Stinchcombe²¹ shows that older organizations are particularly likely to suffer from inertia. While inertia has a negative connotation, it is also a necessary condition for organizational survival as organizational routines can only be developed if some degree of inertia or stability exists.²²

We similarly define outsourcing inertia as *the slow adaptation by organizations to changing circumstances that accommodate higher outsourcing levels*. In terms of clarifying this definition, it is worth noting that inertia does not imply that organizations never change, they just do not change as quickly as the circumstances surrounding them mandate. Furthermore, we acknowledge that the environmental change surrounding an organization is partly created by the actions and behaviors of that organization but particularly of the collective of organizations (i.e., much outsourcing may co-create outsourcing markets), although this is not the focus of our paper. Finally, while the focus of population ecology work is on the survival of firms, our research focus is on the strategy processes through which organizations change their outsourcing levels over time, in relation to organizational performance; we therefore do not suggest our work directly tests structural inertia theory. We now seek to explain the origins and shape of changing

circumstances that accommodate higher outsourcing levels, and then focus on the reasons for slow adaptation to such changes by organizations.

Management practice and the academic literature suggest many instances where it may become beneficial to outsource more activities over time, i.e., to engage in outsourcing processes. First, technological change may lead services or components to become more commodity-like, as appears to be happening in information technology, and thereby improve the relative merits of market transactions.²³ This happens largely through a process of standardization of such inputs, for instance, the introduction of the communication standards that underlie the internet. Second, markets may become more efficient alternatives compared to hierarchies due to less market failure, for instance, when the level of institutional voids in an economy decreases due to liberalization and economic development.²⁴ Third, through repeated transactions and long-term relations with suppliers, more effective governance of outsourcing relationships may be obtained, for instance, because of joint learning or pooling of complementary assets.²⁵ Fourth, the competitive structure of industries can change such that firms need to specialize in a smaller set of capabilities and outsource non-core activities.²⁶ Fifth, the mere fact that other firms have outsourced may increase the prevalence of outsourcing, since suppliers can now obtain additional scale economies through adding a new customer at lower marginal costs and therefore may be willing to forfeit refunds on their fixed cost, implying that there are positive externalities associated with outsourcing.²⁷ Sixth, and building upon the previous, outside suppliers can go through a learning curve when serving their first customers. When serving later customers, they therefore do so more efficiently. The latter two arguments imply that more outsourcing by organizations can improve the attractiveness of the outsourcing market, leading even more organizations to outsource. Such development processes are one reason for the rise of Chinese suppliers to Western manufacturing firms.

If an organization realigns its outsourcing levels to accommodate such changes, no direct performance implication needs to follow. But when it fails to respond to changes and displays outsourcing inertia, this will have a deleterious effect on performance levels, which will be persistently below those of other organizations that are more responsive. Note that, even where they exist, it may be difficult to actually measure such effects across a larger sample of firms. Outsourcing inertia may cause firms to rely on their habitual pattern of vertical integration even when performance improvements can be obtained through outsourcing. What are mechanisms behind this outsourcing inertia?

March argues that feedback-based adaptive processes, which taking outsourcing decisions in response to changed circumstances is an example of, “do not necessarily result in the timely achievement of global optima” because of the properties of settings, human actors, and the properties of adaptive processes themselves.²⁸ Settings may be complex, subjective and open to disputes. Human actors are limitedly rational in their ability to process information and take decisions. And adaptive processes are often inefficient, full of mistakes and slow. We argue these properties often hold in the case of outsourcing.

There is likely to be considerable uncertainty over the outcomes of outsourcing decisions, given that firms’ output markets display considerable fluctuations, both in volumes and technologies.²⁹ And the developmental process of building relations with suppliers is unpredictable, complicated, and often time-consuming.³⁰ It may not always be possible to trace whether observed performance gains or losses are the consequence of an outsourcing decision.³¹ While production cost gains of outsourcing are immediate, the associated transaction costs often occur in the long run and may involve substantial ‘hidden costs’ of outsourcing that are very hard to measure or discover.³²

Outsourcing is known to affect the interfaces among activities in the value chain³³, which requires the effects of outsourcing an activity to be estimated not just on the performance of that activity but simultaneously on the performance of other, related activities. Outsourcing of manufacturing activities, for instance, may have a negative impact on the firm's long-run design and engineering capabilities. Outsourcing is also subject to adjustment time. Outsourcing contracts in business markets normally run over several years and performance reporting is not immediate even where it is accurate. Hence it will take time for any changes in circumstances to feed back into actual outsourcing decision-making.

Outsourcing, or its counterpart of insourcing, carries social adjustment costs as in reallocation or dismissal of people and possible reputation losses that firms may not be willing to bear until the advantages of switching become large enough to overcome these costs.³⁴ Finally, like all managerial decisions, outsourcing decisions will be affected by the bounded rationality of managers, meaning that information processing will be less than perfect. In other words, all three conditions for less than optimal adaptation mentioned by March, complex settings, limitations in individuals, and limitations in adaptive processes are in place.

A certain salience or a rather pressing need may therefore have to be present before outsourcing processes occur.³⁵ In performance terms, because there is outsourcing inertia, the performance benefits of outsourcing need to be substantial before they are discovered and acted upon. So when outsourcing processes take place, we should expect them to be substantial in nature. This coincides with the notion of industry-wide or country-wide waves of outsourcing, where many firms simultaneously decide to outsource, often using similar suppliers and supplier locations.³⁶ It also indicates that there must be some set of triggers for outsourcing processes, inside or outside the organization. To summarize, changed circumstances may lead to outsourcing inertia and associated poorer performance for more inert organizations, when

organizations do catch up, this leads to substantial outsourcing processes, which are driven by multiple factors.³⁷ As argued above, if outsourcing inertia indeed exists, then economizing theories will not provide good reasons for the end of such inertia.

Proposition 1: When changes in environmental circumstances promote more outsourcing, outsourcing inertia becomes negatively associated with firm performance.

Proposition 2: When outsourcing inertia becomes negatively associated with firm performance, this eventually results in substantial outsourcing processes.

Proposition 3: There are multiple drivers of outsourcing processes, which are different from economizing factors.

RESEARCH METHODS

The empirical data employed in this study cover manufacturing businesses operating in the Netherlands. Like in many other countries, outsourcing was a key management trend over the 1990s in the Netherlands.³⁸ In the 1980s various non-core activities, like catering and security, had already been outsourced by manufacturing firms. During the particular time period under study, from 1993, manufacturing firms in the assembly industry increasingly ventured into outsourcing important and high-value parts of their production process as well³⁹, which makes it an especially useful time period and industry context to look at.

The discourse on outsourcing in the Netherlands took further shape during the time period under study. The large and influential consulting firm KPMG wrote a blistering report to promote outsourcing among Dutch managers, drawing partly upon successful international examples and the work of James Brian Quinn.⁴⁰ The work of Quinn and Hilmer was translated and published in *Holland Management Review*, the Dutch equivalent of *Harvard Business Review*. A book

published through an association of industrial suppliers stressed the benefits of outsourcing.⁴¹ Academics discussed appropriate buyer-supplier designs and attempted to document the outsourcing trend.⁴² Associations like NEVI, the Dutch Association for Purchasing Management, also engaged in discussions and activities around outsourcing. Two clearly identifiable practitioner outlets (Praktijkboek Professioneel Inkoopmanagement and particularly Tijdschrift voor Inkoop en Logistiek) regularly featured outsourcing articles, many of them with a positive message, and an increasing number of business conferences took place on the topic. Thus substantial discourse on outsourcing occurred and much of this discourse was positive in outlook.

Various environmental developments promoted outsourcing by firms in the sample during the time period under study. The rise and implementation of new information technology, like EDI, facilitated the ease of communication with external suppliers for manufacturing firms in the Netherlands. In addition key institutional changes occurred. Completion of the Single European Market lowered the costs of transacting with suppliers in other EU countries. For firms from a small country like the Netherlands, this was particularly relevant, as it substantially increased the pool of potential suppliers. Rapid political and economic changes in Central and Eastern Europe implied that an additional, low labor cost, supply market became available, improving the viability of outsourcing, as did the emergence of countries like China and India. Other studies of small European countries like Denmark have shown that in offshoring, a phenomenon that includes international outsourcing, institutional change has also been a key driver⁴³. Finally, privatization efforts by the Dutch government created an atmosphere in which outsourcing of activities became commonplace and broadly accepted, going without much resistance from labor unions at least initially. Thus substantial changes occurred that made increased outsourcing of more and higher value activities not only a viable but in many instances a profitable option. This was especially true for the producers of complex assembly products like electronics,

transportation equipment and machinery, since they additionally benefited from changes towards modular design witnessed across the globe.

Statistics Netherlands (CBS) collects official census data from all Dutch firms and foreign subsidiaries with more than 20 employees on an annual basis. Firms are legally obliged to provide data to Statistics Netherlands. We were granted access to this database. For the present study we use 1993 data as this is the earliest year with this range of data. We will also refer to changes from 1993 and 1998, as 1998 is the most recent year we had data for. Our database covers firms in 85 3-digit level industries that are coded according to the NACE system, which is the European equivalent of the SIC in the United States.

Since we had a specific interest in industries where firms had rapidly increased their outsourcing levels, we decided to look in more detail at a smaller selection of industries. We focus our analysis on the top quartile (21) of industries in terms of outsourcing processes, as defined below, between 1993 and 1998. A list of these 21 industries, the numbers of firms therein, and industry definitions is provided in Table 1. Many of the industries are in the so-called assembly industry, where products consisting of multiple components are assembled (NACE codes 29 through 35). In the process and batch production industries outsourcing was much less prevalent.

 Insert Table 1 about here

The quantitative analysis that follows tries to explain the financial performance of firms. Performance is measured through the firm's return on value added, calculated through dividing profits by internally generated value. Outsourcing inertia is measured as how much a firm outsources in relation to how much it is supposed to outsource, given its own characteristics and the characteristics of its industry. The higher a firm scores on this measure, the more inert it is.

The Appendix provides more detailed descriptions on this and other variables. Other variables in the analysis include the average industry performance, market share, exports, labor productivity, training intensity, R&D intensity and marketing intensity.

FINDINGS

In table 2 the means, standard deviations and correlations among the variables are shown⁴⁴.

 Insert Table 2 about here

We used ordinary least squares (OLS) regression for our tests. The results are presented in Table 3. The first column contains only the control variables. In terms of testing the propositions, proposition 1 will hold true if a negative association between outsourcing inertia and performance can be found when changing circumstances occur; in other words, the higher a firm scores on the outsourcing inertia variable, the lower we would expect its performance to be. Above we described the changing circumstances for this sample. The table confirms that for firms in industries in which an outsourcing wave was about to occur between 1993 and 1998, a negative association is observed in 1993 between the firm's outsourcing inertia and its performance. The model statistics are significant and outsourcing adds to the explanatory value of the models, although ideally we would like to see stronger statistical models. As expected, industry return on value added (ROVA) is positively correlated with firm ROVA. There are smaller positive correlations between the firm's productivity and export ratio and its performance.

 Insert Table 3 about here

To take a first look at proposition 2 we undertook further analysis to see whether substantial outsourcing processes are confined to those industries where positive performance effects were

associated with higher levels of outsourcing. We looked at the bottom quartile of industries in terms of increases in outsourcing between 1993 and 1998. The bottom quartile industries where increases in outsourcing were limited to 0.3% (i.e., almost no net outsourcing processes) were often engaged in crafts work, such as the production of musical instruments. In these industries, tradition and the use of highly skilled labor as a key input may pose limits on outsourcing. Among firms in these industries, we did not observe a negative performance effect associated with outsourcing inertia, which supports proposition 2.

In addition, we investigated what happened after 1993, when the outsourcing wave had started. To do so, we re-ran the analysis for each of the years 1994 to 1998 to investigate how outsourcing inertia affected performance. It turns out that in 1994 there was still a slightly negative performance effect. But in later years that effect turned positive, implying that at higher levels of outsourcing, being inert may not be such a bad thing. This suggests realignment had taken place and that the target might in fact have been overshoot. This finding reflects recent arguments in the outsourcing literature that the relationship between outsourcing and firm performance may be negatively curvilinear: more outsourcing is good, but only up to a point, beyond which outsourcing actually starts to harm performance.⁴⁵

FOLLOW-UP STUDY

These findings raise the important question what factors trigger outsourcing processes to help firms overcome outsourcing inertia. Our third proposition suggests that there are multiple drivers of outsourcing processes other than economizing factors. Since our secondary data could not help us uncover these drivers, and other secondary sources were equally unlikely to be helpful for investigating outsourcing processes in any depth, we undertook follow-up primary data collection through interviews on decision-making processes by managers inside firms. The triangulation of

quantitative and qualitative methods helped to confirm the presence of outsourcing inertia as per the first two propositions, as various respondents spoke about how slow their firms had been to embrace outsourcing and admitted that this had undermined firm performance in the past.

Given our focus, we needed to find industries with substantial outsourcing processes and we chose two industries from the top quartile of industries as identified above. These industries needed to contain enough firms for interviews. We were also looking for variation between the industries in terms of their products to rule out that product characteristics like technological change, which presumably correlates with both TCE and RBV variables, could provide the sole explanation for our findings. Given these considerations, we selected industry 332, 'Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment' and industry 291, 'Machinery for production and use of mechanical power, except aircraft, vehicle and cycle engines'. Within this rather broad industry we focused specifically on 'Manufacture of pumps and compressors' (NACE code 2912). Henceforth we refer to these as 'instruments and appliances' (firms 1 to 6 with respondents 1 to 6) and 'pumps and compressors' (firms and respondents A to F). The Appendix provides more detail on the methods used.

Industries. In instruments and appliances a 7.1% increase in outsourcing was observed between 1993 and 1998, implying significant outsourcing processes. Respondents consistently described their products as being medium to high-tech. They talked about technological change, particularly the increasing electronic content of their products, and shortening product life cycles. One specific component that all six firms had (partially) outsourced during and after the focal period was the printed circuit board (PCB), which given the trend towards electronic content is a very important and high value component of their products. Respondents cited a combination of lack of scale and the benefits of using specialized, up-to-date external PCB suppliers, especially

in light of shortening product life cycles. Respondent 2 said “In the world of electronics, things move fast in components. Your components may be up-to-date during development but by the time you release the product, 18 months down the road, some of them are already outdated.”

In pumps and compressors outsourcing levels increased by 6.7% between 1993 and 1998, implying significant outsourcing processes. In this industry products were generally described as moving along more slowly and being less advanced technologically. Most change was related to the use of different materials depending on customer demand. For instance, Firm A had recently completed its first pump made of titanium, for a customer who pumped around an aggressive liquid that had previously destroyed a steel pump within two years. It outsourced some of the production of that pump to a specialist Italian supplier that knew how to handle titanium. Table 4 summarizes key findings on the twelve firms.

 Insert Table 4 about here

Drivers behind outsourcing processes. We start by discussing the motives behind outsourcing decisions, some of which involved comparisons that broadly looked like economizing decisions. Many firms, for instance, suggested that they no longer integrated specific production processes because they were unable to use machines at full capacity, which then caused a production cost disadvantage vis-à-vis specialized outside suppliers consistent with TCE’s transaction frequency argument. Respondent 3 when talking about a specific process said “you have to guarantee a 98% load on that machine, because if it is not at full capacity you can no longer compete with a company that only produces those components.” He stressed that because the firm could no longer do that, they had turned themselves into a ‘showcase manufacturer’, with very limited internal production capacity, along the lines of the observation by Brusoni and colleagues that firms know more than they make.⁴⁶ Other firms, like Firm 6,

increased reliance on external suppliers because they grew so rapidly that internal resources and capacity were simply insufficient to keep up with growth, in line with how dynamic industries are described in the RBV. Firm E, after a management buy-out in 1998, drastically restructured its outsourcing policies following ‘core business’ thinking. Outsourcing also involved all kinds of services activities. Firm D had outsourced all of its HRM activities, including crucial functions like selection, training, and development.

When it came to the drivers of outsourcing processes, however, other factors emerged. From the two industries and twelve interviews, we identify five broad drivers of outsourcing processes. We acknowledge that these drivers may overlap to an extent and can also interact with one another in producing an outsourcing process.

1. *Managerial initiative, when an individual manager based on previous experiences elsewhere initiates an outsourcing process (initiative).*

Sourcing managers admitted to holding views that were sometimes at odds with the rest of the organization and that shaped the organization’s decisions. Respondent 3 said about future outsourcing trends inside his firm, “It will only continue, but that’s my personal vision of things.” In Firm 6, the role played by outside experience of newly arrived individuals in overcoming outsourcing inertia was highlighted: “Look, when you work somewhere and you have always done things in a certain manner, you may develop the idea that you’re the only one who knows how to get things done. And you have never seen something like that [outsourcing] before, but when you have seen it, you may be prepared to do it.” In that same firm, the new CEO thought outsourcing was very important and had turned it into a key policy. He wanted to implement it more quickly but internal resistance made that difficult. In Firm B, replacement of the management team led to drastic changes in the firm’s outsourcing policy. The earlier management team, consisting entirely of former consultants, heavily favored outsourcing, but the

new team less so. Respondent A admitted to outsourcing often being a ‘gut feel’ decision inside the company: “You buy things and you make things. Then you start comparing. You walk around the plant sometimes and then I wonder, for example, is that still happening here?”

Initiative came to the fore when individuals observed or analyzed that outsourcing of specific processes might benefit the organization. These individuals then drove the outsourcing process forward by initiating reviews, obtaining information, taking decisions and lobbying for outsourcing. They can be top management or functional specialists like the sourcing managers we interviewed. Academic literature has talked about how managers match problems and solutions, especially through the notion of garbage can decision making.⁴⁷ In the garbage can model it is managers who marry problems, like a lack of capacity utilization on a machine, with solutions, in this case outsourcing of that machine and some manufacturing operation. We believe this partly explains when outsourcing processes start. Clearly, taking the initiative for a new strategy improves an individual manager’s standing within the organization, especially if that strategy proves to be fruitful.

2. *A higher level decision, from regional, divisional or global headquarters abroad, to increase outsourcing levels, leading to specific unit level outsourcing decisions (hierarchy).*

Firms varied on other dimensions as well. Businesses that were part of large multinational firms for instance had relatively analytical, though not formalized, outsourcing procedures in place, while smaller firms did not. These multinational firms were more likely to know their competitors’ outsourcing strategies and were often able to draw some meaningful comparison with their competitors. Large multinational firms were much more likely to engage in outsourcing, especially global outsourcing, and some exchanged information on outsourcing policies with colleagues abroad. For these firms, divisional or global headquarters were normally

involved in outsourcing decisions, often to the extent that they dictated decisions. Respondent 3 said that while small, operational, outsourcing decisions were taken locally the decision to outsource the injection molding unit was taken by its headquarters in the United States.

Hierarchy occurs when regional, divisional or global headquarters abroad instructed or advised local units (subsidiaries) to start outsourcing more. In our interviews, some managers were more or less instructed to start outsourcing more by headquarters, sometimes at the instigation of shareholders, and had to find suitable activities themselves. Such a unidirectional order from higher up in the corporate hierarchy corresponds to a view according to which knowledge, in this case knowledge on outsourcing and its competitive implications, is transferred from headquarters to subsidiaries.⁴⁸ Alternatively, local practices stemming from subsidiary initiative might also be copied to elsewhere in multinational corporations.⁴⁹ Our respondents did not allude to that, although a few claimed they had some international standing because of their outsourcing practices. Managers who are an active part of the internal multinational network are more likely to set the directions for outsourcing, rather than simply being subject to them.

3. Behavior displayed by competing, similar or iconic firms, which gets imitated by the focal firm (imitation).

When looking at how competitors' outsourcing policies affect the decisions that managers made, we found that many managers were actually unaware of the outsourcing policies of their direct competitors. Although they cited competitive pressures in general as a key reason to outsource, with few exceptions they did not make explicit comparisons between their own and their competitors' outsourcing strategies. Competitive intelligence in this area is apparently limited, reflecting the argument of Zajac and Bazerman.⁵⁰ After admitting that he knew little about the identity of competing firms and had no idea about what they outsourced, Respondent 4 said that "I think that cost pressures are a key motive for outsourcing."

Quite a few firms in both industries looked at the practices of similar manufacturing firms they did not compete with directly. Often these firms were located in the same region or part of the same supply chain, attesting to the importance of local search in decision-making.⁵¹ Respondent 6 admitted using informal contacts with individuals working for similar firms. A third type of comparison was with iconic firms or industries. As perhaps is to be expected the automobile industry featured heavily as an icon but interestingly so did the food industry. Where managers used such outsourcing examples, they admitted this shaped their decisions. Firm D, as a supplier to the automobile industry, had in fact outsourced quite a few activities prior to 1993, which shows that industry's forwardness when it comes to outsourcing.

Imitation involves a learning process whereby practices in use by other companies are copied. Respondents talked about how outsourcing, for instance, by car manufacturers or food producers, caused them to reconsider their own outsourcing levels. We did not find many instances where outsourcing by a direct competitor caused a company to initiate an outsourcing process, although several respondents mentioned that they keep track of which suppliers their competitors use. But the interviews provided indications companies learned from other firms they had met at local and regional events, and from well-known companies like Toyota.⁵² Academic literature suggests that a practice like outsourcing can spread across a population of organizations in sudden waves, in line with our quantitative data presented earlier, through competitive bandwagons. A competitive bandwagon effect will occur when a firm perceives that outsourcing helps to overcome a performance gap among a large number of its industry competitors and when the firm believes it can similarly improve its performance through outsourcing. From a manager's point of view this implies that the behavior of competing firms provides important clues about the usefulness of outsourcing as a strategy.

In more academic terms, outsourcing some activities will lead to such an improvement in the performance of the firm that it is worth overcoming existing inertia. In addition, the performance effect must be believed to be so long-lasting as to make adjustment time essentially irrelevant. Furthermore the presence of highly visible and exemplary firms that successfully mount the outsourcing challenge may lead other firms to engage in outsourcing.⁵³

4. Advice and information provided by third parties like suppliers, customers, consultants, and joint venture partners (outsider advice).

Outside parties were also involved in outsourcing decisions. Respondent 4 said of his interaction with consultants that they suggested substantial cost savings could be obtained by outsourcing a specific activity. Our respondent indicated that, in practice, this was not easy to realize but the consultant “did shake things up in the long term. Someone comes calling from the outside and that’s how other people became convinced and hence at a later stage, and perhaps earlier than planned, the prints were outsourced as well. Everything we had left was then farmed out as well.” Firm D also used consultants, mostly to listen to their arguments in favor of outsourcing. Suppliers and customers similarly exerted pressures to outsource. Manager C was regularly confronted with suppliers who suggested Firm C might be able to lower costs or improve final products through outsourcing.

The managers we interviewed generally recognized that outside advisors often had a vested business interest in promoting outsourcing. Nonetheless, they believed they could offer important information and experiences and in some cases this swayed the decision towards outsourcing. Similar to the third trigger, the institutional literature, especially the work on bandwagons, helps us explain these effects. Institutional bandwagons occur when important actors like suppliers or consultants help to increase the legitimacy of a practice like outsourcing. Earlier we discussed how KPMG did precisely that in the Netherlands in the early 1990s.

Institutional bandwagons do not presuppose performance gains associated with implementing an innovation like outsourcing. Rather, the presence of institutional pressures is a sufficient condition for a bandwagon to occur. Widespread adoption of outsourcing by other firms can increase the legitimacy of outsourcing as a strategy as it allows decision-makers to be associated with what is seen as a winning recipe, even if outsourcing is not obviously linked to performance improvements for the firm in question. So active managers must take into account how many other firms are instigating outsourcing processes, to ensure they do not fall behind what is an accepted practice.

5. *Knowledge obtained from a variety of information sources like conferences and specialist magazines (knowledge sources).*

Some respondents also used outside information, primarily from a variety of knowledge networks and from popular management literature. They varied in the extent to which they found this information useful and applicable. Respondent E, a veteran with decades of experience in the job, for instance, suggested that “what I find time and time again is that I do not see many new things there” and Respondent 5 suggested he might be overly stubborn as he did not see any novelty, either. Respondents 4 and 6 however, as relative newcomers, did use these sources a lot and in these cases they influenced decision-making as well. Respondent 6 argued that “yes, these magazines are certainly useful to me, although I also think that there is a fair amount of common sense involved in this” (the decision to start an outsourcing process).

Knowledge sources like the popular management literature and practitioner conferences made managers more knowledgeable about outsourcing and its potential benefits. Some of our respondents gained an understanding of outsourcing by reading about it or engaging in discussions with other practitioners. Here a parallel to the technology search literature emerges.⁵⁴ This literature describes how companies use outside knowledge sources to obtain ideas that help

them innovate their products. In our case, these outside knowledge sources helped managers form ideas about outsourcing and its merits and made them consider higher levels of outsourcing. While searching for new ideas can be costly for managers, it also generates benefits.

DISCUSSION

Practical implications. For practitioners a deeper understanding of outsourcing processes is of great value. The interest of practitioners is in when and how to engage in outsourcing processes. What is the right time to outsource a component that is now integrated? And if we are going to transfer the production of that component to an outside supplier, how do we sell that decision to our own employees and manage the transfer process? This paper has suggested that managers instigate outsourcing processes for reasons that do not fit the economizing label. Does it mean that these reasons are inherently inefficient or even irrational? We would argue that they are not. While managers need to uphold firms' efficiency, they also need to consider the social context they and their firms operate in. For instance, retaining some level of legitimacy is an essential ingredient of survival. Managers who are seen to outsource 'too soon', i.e., when stakeholders do not perceive a clear-cut case for outsourcing, may risk putting their firms' legitimacy at stake.

And bandwagons are not necessarily good or bad. Instead, they simply form an important heuristic available to managers who are faced with complex decisions with uncertain outcomes. In our sample, bandwagons helped overcome initial inertia by creating outsourcing guidelines for managers, which one might see as a good trait of these bandwagons (at least from a performance point of view). Firms that are subject to bandwagons may benefit through learning processes that would otherwise not have occurred. Firms can apply this heuristic to learn how much and when to outsource.

A further issue of interest to managers is how outsourcing processes, their timing, and drivers, are related to outcomes. How much of a performance hit do firms take if they outsource too soon or rather too late? Financial performance measures are one potential set of outcomes, and offer scope for further research, but it is also worthwhile to look at other outcome measures. For instance, if an organization instigates outsourcing processes around the same time as many of its competitors or other local companies, is outsourcing then seen as a more legitimate strategy and is it less likely to lead to resistance from employees and other stakeholders? Or is it actually the case that the media attention an outsourcing wave generates makes it harder to outsource?

Academic implications. An economizing perspective is not sufficient to explain when and how outsourcing processes of high value activities such as those studied here are started. Hence the prediction that there will not be any performance impact of outsourcing, i.e., that there is complete alignment, may often not be correct. While there is some economizing core to the explanation of outsourcing levels, we sketched a range of factors related to the properties of settings, human actors, and adaptive processes that suggested that the timing of outsourcing processes may be subject to inertia. Not only is there some degree of misalignment that is inconsistent with the economizing framework, but the outsourcing process itself also displays many characteristics that are not consistent with the economizing approach. We found that outsourcing processes were driven by personal preferences, organizational histories, social networks, organizational politics and other factors. Outsourcing processes, in other words, are inherently more complex than is suggested by the economizing approaches and involve *socializing* aspects as well, as described by the five drivers of outsourcing identified in this study.

We can propose a range of possible future research questions and investigations. First, there is scope for conceptual contributions that do more justice to the foundations underlying

each of the drivers than we have been able to do here. Such conceptualizing could focus on developing propositions on how and when each of the five drivers come into play, building upon the approaches we discussed above and possibly others as well. It ought to deepen our understanding of how economizing predictors of optimal outsourcing levels are related to the triggers that produce outsourcing processes. In other words, where and how do theories of alignment and misalignment meet?⁵⁵ This will address concerns that strategy content and strategy process are studied separately but not in conjunction.⁵⁶

Empirically, establishing whether our five proposed drivers occur with any frequency and how strong their effects are on the outsourcing process, is one key question. Related to that question, is the possibility that there are further drivers that our limited set of interviews in a specific context did not pick up. Survey or similar methods appear to be an appropriate method for looking at this question. Secondary data may, on the other hand, be useful in establishing the degree to which patterns of outsourcing processes are specific to a firm or determined by its industry or country context.

Research limitations. The quantitative study does not explain very much variance in the dependent variable. This suggests there are other important predictors of firm profitability that are not represented in our database. For instance, managers make other decisions and put in place other practices that affect performance, and perhaps interact with outsourcing decisions. An unfortunate characteristic of many analyses of secondary data which use hard measures, rather than people's perceptions, is that it is difficult to explain the phenomenon at hand well, especially if that phenomenon is performance. As a consequence, our outsourcing inertia variable does not explain very much of the firm's performance. Another limitation of our quantitative study is that it measures outsourcing inertia based on predicted outsourcing levels, rather than directly

observing managerial behaviors. We can only conclude in favor of our first two propositions by invoking the context of measurement. That context seemed to clearly be appropriate for increases in outsourcing. Arguably, quantitative studies in management should generally pay more attention to the context of measurement. A final limitation is that only a single measure of performance was available.

There are limitations associated with our qualitative study too. We asked respondents to retrospectively assess outsourcing decisions and outsourcing processes, with our time period of interest going back some ten years. Although we ensured our respondents were experienced in their jobs, not all of them had been in place for the full ten years. Our follow-up telephone interviews were a consequence of the need to contact other people in the organization to fill gaps in the recollection of our primary interviewees. Furthermore we did not ask for specific numbers, which are hard to remember, but focused on events and trends. Still it is possible respondents may not have been entirely accurate in some of their responses. In addition we used single respondents which may have resulted in somewhat biased answers.

On the positive side, our use of two research methods allowed us to increase our understanding of outsourcing in the industries concerned in important ways. While secondary data allowed us to establish the presence of an outsourcing wave, with a positive performance association prior to and a negative performance association after the wave, it did not generate insights into why and how the wave had occurred. The qualitative study confirmed rapid increases in outsourcing and showed which activities were most likely to have been outsourced. It complemented the quantitative study by showing in some detail what triggered outsourcing processes and how these processes occurred. In strategic management, there are very few studies that combine quantitative and qualitative methods and we hope to have shown the benefits of doing this here. Finally, the drivers for outsourcing processes we identified in this article suggest

that the use of secondary data may not be a very good research strategy for capturing the antecedents of changes in outsourcing levels, as secondary data sources typically would not be able to capture the drivers well.

CONCLUSIONS

In this article we presented the concept of outsourcing inertia as a useful way of characterizing why organizations do not make perfect and immediate adjustments to their outsourcing levels when (environmental) circumstances change. We showed that such inertia leads to unexploited performance potential which may lead to rapid outsourcing. We then focused on what triggers the outsourcing process and suggested five different drivers. Reflecting on these drivers we provided managers with advice on how to manage the outsourcing process. More research on what triggers outsourcing processes, how these processes unfold, and what performance implications flow from them, can inform academic thinking and provide valuable guidelines for managers who are involved in outsourcing decision-making.

APPENDIX

Variables in quantitative study

Performance. Measuring the performance effect of outsourcing is challenging. We need a balanced measure that takes into account changes in profit levels as a consequence of outsourcing. We employ the return on value added (ROVA). This measure is calculated as total profitability divided by the firm's value added. The value added is calculated as sales minus external sourcing. If a firm outsources, this will not only lower the denominator but also the numerator of the ROVA measure, as suppliers take on both the costs and the benefits of activities.

Outsourcing inertia. We first calculate the ratio of industrial purchasing to total sales. This measure comprises all activities and indicates to what extent a firm relies on external suppliers to produce its products. This is a firm's outsourcing level. Firms in the sample of industries on average increased outsourcing by a steep 6.3% from 44.9% in 1993 to 51.2% in 1998. This was about double the average increase observed for firms across all 85 industries. By contrast, for firms in the bottom 21 industries an increase of only 0.3% was observed. Next we run an ordinary least squares regression analysis to try and predict a firm's outsourcing level, using a range of firm and industry level variables other than those below (results available upon request). The outsourcing inertia variable is calculated by deducting from this predicted outsourcing level the firm's actual outsourcing level. In other words, the less a firm has outsourced compared to its predicted level of outsourcing, the more outsourcing inertia it displays. Given that, the higher a firm scores on the outsourcing inertia variable, the lower we would expect its performance to be (as per proposition 1).

Industry performance. To control for industry-level variations in performance, we inserted the average industry level ROVA.

Industry concentration. Highly concentrated industries may be less profitable. To control for this effect, we calculate an industry's Herfindahl ratio.

Industry labor productivity. We control for the industry's average sales per employee. More productive industries could be more profitable too.

Training intensity. Total industry spending on training employees was divided by the industry's sales to obtain a measure of the extent to which investment in skills take place. Such training could influence performance positively.

R&D intensity. Total industry spending on research and development was divided by the industry's sales. This could create barriers to entry that raise firm performance.

Marketing intensity. Total industry spending on marketing and advertising was divided by the industry's sales. This could likewise create entry barriers that raise firm performance.

Labor productivity. We control for the firm's sales per employee, as it may be one positive determinant of firm performance.

Exports. The level of exports of a firm is an indicator of its success in internationalizing, which may relate to its profit levels.

Market share. Given the focus on the industry as the level of analysis, an appropriate control variable is the firm's logged *market share* in its 3-digit industry.

Qualitative study

We selected specific firms through Chamber of Commerce data. Given the country size, we did not put restrictions on geographical locations, although we ensured that firms were covered by our secondary data (this primarily involved assessing whether firms had more than 20 employees). We called firms to find an appropriate interviewee, sent that executive an introductory letter, and called to see whether they were interested in making an interview

appointment. We got some refusals due to lack of time but these did not seem to be symptomatic. We added firms and interviews until we felt that additional interviews would not generate many further insights. In both industries we interviewed executives at six firms.

Interviewees were all sourcing executives, although their exact titles and responsibilities differed somewhat. Interviews were semi-structured, revolving around activities that were outsourced, outsourcing processes and what factors drove decisions to initiate outsourcing processes. We for instance asked who in these organizations initiated outsourcing decisions and how this affected outsourcing processes. Interviews typically lasted between 1.5 and 2 hours. In a few instances, where information had to be collected from other individuals, a brief follow-up telephone interview took place. All interviews were tape recorded for later transcription and involved two interviewers. Interviewees were sent the transcripts for approval. To check whether the interviews conformed to general trends, we also conducted four interviews (not reported here) with industry experts, who were consultants or employees of industry federations. No major discrepancies appeared.

TABLE 1
3-digit level NACE codes of industries, numbers of firms and industry descriptions.

Code	N	Description
159	25	Manufacture of beverages
177	11	Manufacture of knitted and crocheted articles
193	16	Manufacture of footwear
232	10	Manufacture of refined petroleum products
241	66	Manufacture of basic chemicals
251	20	Manufacture of rubber products
274	21	Manufacture of basic precious and non-ferrous metals
291	81	Machinery for production and use of mechanical power, except aircraft, vehicle and cycle engines
292	255	Manufacture of other general purpose machinery
294	20	Manufacture of machine-tools
300	12	Manufacture of office machinery and computers
311	26	Manufacture of electric motors, generators and transformers
312	24	Manufacture of electricity distribution and control apparatus
321	17	Manufacture of electronic valves and tubes and other electronic components
332	44	Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment
334	11	Manufacture of optical instruments and photographic equipment
342	76	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
343	19	Manufacture of parts and accessories for motor vehicles and their engines
351	78	Building and repairing of ships and boats
353	4	Manufacture of aircraft and spacecraft
355	4	Manufacture of other transport equipment n.e.c.

TABLE 2
Means, standard deviations and correlations among variables for top quartile of outsourcers (N = 756).

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1 Industry ROVA	.17	.04	1									
2 Industry concentration	5.65	5.70	.30	1								
3 Industry productivity	282.6	249.0	.36	.34	1							
4 Training intensity	.67	.26	.03	-.18	-.45	1						
5 R&D intensity	.80	1.12	.53	.32	.26	-.12	1					
6 Marketing intensity	1.08	.59	.62	-.03	.33	.03	.43	1				
7 Labor productivity	291.9	571.7	.15	.19	.52	-.22	.11	.12	1			
8 Export ratio	36.3	35.8	.35	.15	.22	-.13	.28	.30	.15	1		
9 Market share	1.54	4.27	.19	.45	.16	-.15	.08	.03	.21	.21	1	
10 Outsourcing inertia	.30	14.0	-.05	.05	.03	-.01	-.03	-.07	-.10	-.10	-.05	1
11 ROVA	16.7	19.4	.22	.07	.08	.02	.12	.13	.11	.16	.10	-.17

TABLE 3
Ordinary least squares regression (unstandardized betas and standard errors) on 1993
return on value added (N=756).

*** significant at .001; ** significant at .01; * significant at .05; † significant at .10.

	<i>Model 1</i>		<i>Model 2</i>	
	Beta	SE	Beta	SE
Industry ROVA	94.9	27.7(***)	.93	.24(***)
Industry concentration	-.07	.16	-.02	.16
Industry labor productivity	.00	.00	.00	.00
Training intensity	1.94	3.16	2.10	3.13
R&D intensity	-.03	.78	-.07	.77
Marketing intensity	-.61	1.64	-.80	1.62
Labor productivity	.00	.00(*)	.00	.00(†)
Export ratio	.05	.02(*)	.04	.02(†)
Market share	.20	.19	.16	.19
Outsourcing inertia			-.19	.05(***)
F-value	6.07(***)		7.08(***)	
R ²	.068		.087	
Adjusted R ²	.057		.075	

TABLE 4
Summary of industry cases

<i>Pumps and compressors</i>	Firm A	Firm B	Firm C	Firm D	Firm E	Firm F
<i>Firm</i>	Large multinational, many exports	Large multinational, many exports	Medium-sized Dutch multinational, market leader	Large multinational, market leader	Small local firm, niche player	Large multinational, many exports
<i>Outsourcing history</i>	Traditionally highly integrated	Traditionally highly integrated	Traditionally not very integrated	Traditionally somewhat integrated	Traditionally highly integrated	Traditionally highly integrated
<i>Outsourcing processes</i>	Few	Some, more substantial after 1998	Few, substantial	Some, substantial	Some, many after 1998	Some
<i>Drivers of outsourcing process</i>	Similar firms	Consultants	Management literature, knowledge networks, suppliers	Related firms, icons, global headquarters, consultants	Management literature, suppliers	Similar firms, informal knowledge networks, global headquarters, customers

(Table 4, continued)

<i>Instruments</i>	Firm 1	Firm 2	Firm 3	Firm 4	Firm 5	Firm 6
<i>and appliances</i>						
<i>Firm</i>	Large multinational, market leader	Large multinational, cost focus	Large multinational, market leader	Small local firm, many exports	Small local firm, many exports, market leader	Small local firm, many exports, market leader
<i>Outsourcing history</i>	Traditionally highly integrated	Traditionally integrated	Traditionally highly integrated	Traditionally highly integrated	Traditionally integrated	Traditionally highly integrated
<i>Outsourcing processes</i>	Many and substantial	Limited but one large offshoring decision	Many and substantial	Substantial, part of corporate restructuring	Some, limited internal capacity	Many and substantial
<i>Drivers of outsourcing processes</i>	Competitors, icons, management literature, knowledge networks, global headquarters	Divisional headquarters, suppliers	Competitors, similar firms, management literature, knowledge networks, divisional headquarters, consultants	Management literature, consultants	Similar firms, joint venture parents	Outside experience, management literature, knowledge networks

ENDNOTES

- ¹ Brusoni, S., Prencipe, A., & Pavitt, K. 2001. Knowledge specialization, organizational coupling, and the boundaries of the firm: Why do firms know more than they make? *Administrative Science Quarterly*, 46: 597-621. Conklin, D. W. 2005. Risks and rewards in HR business process outsourcing. *Long Range Planning*, 38: 579-598.
- ² Walker, G., & Weber, D. 1984. A transaction cost approach to make-buy decisions. *Administrative Science Quarterly*, 29: 373-391. Williamson, O. E. 1985. *The Economic Institutions of Capitalism*. New York: Free Press.
- ³ Holmström, B., & Roberts, J. 1998. The boundaries of the firm revisited. *Journal of Economic Perspectives*, 12: 73-94.
- ⁴ Barney, J. B. 1999. How a firm's capabilities affect boundary decisions. *Sloan Management Review*, 40(3): 137-145. Leiblein, M. J., & Miller, D. J. 2003. An empirical examination of transaction- and firm-level influences on the vertical boundaries of the firm. *Strategic Management Journal*, 24: 839-859.
- ⁵ Leiblein, M. J., Reuer, J. J., & Dalsace, F. 2002. Do make or buy decisions matter? The influence of organizational governance on technological performance. *Strategic Management Journal*, 23: 817-833. Masten, S. E. 1993. Transaction costs, mistakes, and performance: Assessing the importance of governance. *Managerial and Decision Economics*, 14: 119-129. Williamson, O.E. 1991. Strategizing, economizing, and economic organization. *Strategic Management Journal*, 12: 75-94.
- ⁶ Williamson, O.E. 1991. Strategizing, economizing, and economic organization. *Strategic Management Journal*, 12: 75-94.
- ⁷ Afuah, A. 2001. Dynamic boundaries of the firm: Are firms better off being vertically integrated in the face of a technological change? *Academy of Management Journal*, 44: 1211-1228.
- ⁸ Womack, J. P., Jones, D. T., & Roos, D. 1990. *The machine that changed the world*. New York: Harper-Perennial.
- ⁹ Bettis, R., Bradley, S., & Hamel, G. 1992. Outsourcing and industrial decline. *Academy of Management Executive*, 6(1): 7-16. Kotabe, M. 1998. Efficiency vs. effectiveness orientation of global sourcing strategy: A comparison of U.S. and Japanese multinational companies. *Academy of Management Executive*, 12(4): 107-119.
- ¹⁰ Dyer, J. H. 1996. How Chrysler created an American Keiretsu. *Harvard Business Review*, 74(4): 42-56. Kotabe (1998).
- ¹¹ On page 836. See: Lei, D., & Hitt, M. A. 1995. Strategic restructuring and outsourcing: The effect of mergers and acquisitions and LBOs on building firm skills and capabilities. *Journal of Management*, 21: 835-859.
- ¹² On page 53 of Friedberg, A. H., & Yarberr, W. A. 1991. Audit rights in an outsource environment. *Internal Auditor*, August: 53-57.
- ¹³ Mol, M. J. 2007. *Outsourcing: Design, Process and Performance*. Cambridge: Cambridge University Press.
- ¹⁴ Harrigan, K. R. 1986. Matching vertical integration strategies to competitive conditions. *Strategic Management Journal*, 7: 535-555. Quinn, J. B., & Hilmer, F. G. 1994. Strategic outsourcing. *Sloan Management Review*, 35(4): 43-55.
- ¹⁵ For instance Jacobides, M. G., & Winter, S. G. 2005. The co-evolution of capabilities and transaction costs: explaining the institutional structure of production. *Strategic Management Journal*, 26: 395-413.
- ¹⁶ Masten (1993).
- ¹⁷ Leiblein et al (2002).
- ¹⁸ Ghoshal, S. 2005. Bad management theories are destroying good management practices. *Academy of Management Learning & Education*. 4: 75-91.
- ¹⁹ Szulanski, G., Porac, J., & Doz, Y. 2005. Introduction: The Challenge of Strategy Process Research. In: Szulanski, G., Porac, J., & Doz, Y. (eds.) *Strategy Process*. *Advances in Strategic Management*, Vol. 22, pp. xiii-xxxv. Oxford: Elsevier.
- ²⁰ On page 151. Hannan, M.T., & Freeman, J. 1984. Structural inertia and organizational change. *American Sociological Review*, 49: 149-164.
- ²¹ Stinchcombe, A. 1965. Social structure and organization. *Handbook of Organizations*, ed. J. March, pp. 142-193. Chicago: Rand McNally.
- ²² Hannan and Freeman (1984).
- ²³ Malone, T. W., Yates, J., & Benjamin, R. I. 1987. Electronic markets and electronic hierarchies. *Communications of the ACM*, 30: 484-497.
- ²⁴ Toulan, O. 2002. The impact of market liberalization on vertical scope: The case of Argentina. *Strategic Management Journal*, 23: 551-560.
- ²⁵ Dyer, J. H., & Singh, H. 1998. The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*, 23: 660-679. Gulati, R. 1995. Does familiarity breed trust? The implications of repeated ties for contractual choice in alliances. *Academy of Management Journal*, 38: 85-

-
112. Kotabe, M., Martin, X. & Domoto, H. 2003. Gaining from vertical relationships: Knowledge transfer, relationship duration, and supplier performance improvement in the U.S. and Japanese automobile industries. *Strategic Management Journal*, 24: 293-316.
- ²⁶ Quinn and Hilmer (1994).
- ²⁷ Domberger, S. 1998. *The contracting organization: A strategic guide to outsourcing*. Oxford: Oxford University Press.
- ²⁸ On page 204. March, J. G. 2006. Rationality, foolishness, and adaptive intelligence. *Strategic Management Journal*, 27: 201-214.
- ²⁹ Walker and Weber (1984).
- ³⁰ Ring, P. S., & Van de Ven, A. H. 1994. Developmental processes of cooperative interorganizational relationships. *Academy of Management Review*, 19: 90-118.
- ³¹ In the literature this is known as causal ambiguity over the means-ends relationship. Mosakowski, E. 1997. Strategy making under causal ambiguity: Conceptual issues and empirical evidence. *Organization Science*, 8: 414-442.
- ³² Domberger (1998). Hendry, J. 1995. Culture, community and networks: The hidden cost of outsourcing. *European Management Journal*, 13, 218-229. Kotabe, M., Mol, M.J., & Ketkar, S. 2008. An evolutionary stage model of outsourcing and competence destruction: A Triad comparison of the consumer electronics industry. *Management International Review*, 48: 65-93.
- ³³ Kotabe (1998).
- ³⁴ Mol (2007).
- ³⁵ Haunschild, P. R., & Miner, A. S. 1999. Modes of interorganizational imitation: The effects of outcome salience and uncertainty. *Administrative Science Quarterly*, 42: 472-500.
- ³⁶ Bettis et al (1992). Kotabe (1998).
- ³⁷ This is reminiscent of the notion of a punctuated equilibrium. See: Tushman, M., & Anderson, P. 1986. Technological discontinuities and organizational environments. *Administrative Science Quarterly*, 31, 439-465.
- ³⁸ De Wit, B., Mol, M. J., & Van Drunen, E. C. 1998. *Uitbesteden en toeleveren: Motieven, trends en effecten*. Utrecht: Lemma.
- ³⁹ De Wit et al (1998).
- ⁴⁰ KPMG Consultants (1994). *Uitbesteden in Nederland*. Utrecht: KPMG.
- ⁴¹ Piëst, E., & Ritsema, H. A. (eds.) 1993. *Toeleveren - uitbesteden*. Groningen: Wolters-Noordhoff.
- ⁴² De Wit et al (1998). Nooteboom, B. 1994. *Management van partnerships: In toeleveren en uitbesteden*. Schoonhoven, NL: Academic Service.
- ⁴³ See Maskell, P., Pedersen, T., Petersen, B., & Dick-Nielsen, J. 2007. Learning paths to offshore outsourcing: From cost reduction to knowledge seeking. *Industry & Innovation*, 14: 239-257.
- ⁴⁴ The average for the outsourcing inertia variable is not exactly 0 because slight sample size differences between the variables used to predict outsourcing inertia and those included in this correlation table.
- ⁴⁵ See Mol (2007) and Kotabe, M., & Mol, M.J. (2009) Outsourcing and firm profitability: A negative curvilinear effect. *Journal of Purchasing and Supply Management*, 15: 205-213.
- ⁴⁶ Brusoni et al (2001).
- ⁴⁷ This behavior may be explained through the managerial lens of the Carnegie Mellon school and its 'problemistic search' model. See: Cyert and March (1963). Cohen, M. D., March, J. G., & Olsen, J. P. 1972. A garbage can model of organizational choice. *Administrative Science Quarterly*, 17: 1-25.
- ⁴⁸ This is the classical international business approach. Dunning, J. H. 1988. The eclectic paradigm of international production: A restatement and some possible replications. *Journal of International Business Studies*, 19: 1-31.
- ⁴⁹ This we find in more recent international business literature. Birkinshaw, J. 1997. Entrepreneurship in multinational corporations: The characteristics of subsidiary initiatives. *Strategic Management Journal*, 18: 207-229.
- ⁵⁰ Zajac, E. J., & Bazerman, M. H. 1991. Blind spots in industry and competitor analysis: Implications of interfirm (mis)perceptions for strategic decisions. *Academy of Management Review*, 16: 37-56.
- ⁵¹ Cyert, R. M., & March, J. G. 1963. *A behavioral theory of the firm*. Englewood Cliffs, N.J.: Prentice-Hall.
- ⁵² Imitation of the behavior of competitors has been analyzed in institutional theory, especially the literature on bandwagons. Abrahamson, E., & Rosenkopf, L. 1993. Institutional and competitive bandwagons: Using mathematical modeling as a tool to explore innovation diffusion. *Academy of Management Review*, 18: 487-517.
- ⁵³ Haunschild and Miner (1999).
- ⁵⁴ Katila, R., & Ahuja, G. 2002. Something old, something new: A longitudinal study of search behavior and new product introduction. *Academy of Management Journal*, 45: 1183-1194. An application of this to management

practices like outsourcing can be found in Mol, M.J., & Birkinshaw, J. (2009) The sources of management innovation: When firms introduce new management practices. *Journal of Business Research*, 62: 1269-1280.

⁵⁵ Mol (2007).

⁵⁶ Nerur, S. P., Rasheed, A. A., & Natarajan, V. 2008. The intellectual structure of the strategic management field: an author co-citation analysis. *Strategic Management Journal*, 29: 319-336.